



HUAWEI HG552d Home Gateway

User Guide



HUAWEI HG552d Home Gateway
V100R001

User Guide

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1 Safety Precautions

To use the device properly and safely, read these warnings and precautions carefully and strictly observe them during operation. Unless otherwise specified, the term "device" refers to the device and its accessories.

Basic Requirements

- During storage, transportation, and operation of the device, keep it dry and prevent it from colliding with other objects.
- Do not dismantle the device. In case of any fault, contact an authorized service center for assistance or repair.
- Without authorization, no organization or individual can change the mechanical, safety, or performance design of the device.
- When using the device, observe all applicable laws and regulations and respect the legal rights of other people.

Environmental Requirements for Using the Device

- Before connecting and disconnecting cables, stop using the device, and then disconnect it from the power supply. Ensure that your hands are dry during operation.
- Keep the device far from sources of heat and fire, such as a heater or a candle.
- Keep the device far from electronic appliances that generate strong magnetic or electric fields, such as a microwave oven or a refrigerator.
- Place the device on a stable surface.
- Place the device in a cool and well-ventilated indoor area. Do not expose the device to direct sunlight. Use the device in an area with a temperature ranging from 0°C to 40°C.
- Do not block the openings on the device with any object. Reserve a minimum space of 10 cm around the device for heat dissipation.
- Do not place any object (such as a candle or a water container) on the device. If any foreign object or liquid enters the device, stop using the device immediately, power it off, remove all the cables connected to it, and then contact an authorized service center.
- During thunderstorms, power off the device, and then remove all the cables connected to it to prevent it from getting damaged due to lightning strikes.

Areas with Inflammables and Explosives

- Do not use the device where inflammables or explosives are stored, for example, in a gas station, oil depot, or chemical plant. Otherwise, explosions or fires may occur. In addition, follow the instructions indicated in text or symbols.
- Do not store or transport the device in the same box as inflammable liquids, gases, or explosives.

Accessory Requirements

- Use only the accessories supplied or authorized by the device manufacturer. Otherwise, the performance of the device may get affected, the warranty for the device or the laws and regulations related to telecommunications terminals may become null and void, or an injury may occur.
- Do not use the power adapter if its cable is damaged. Otherwise, electric shocks or fires may occur.
- Ensure that the power adapter meets the specifications indicated on the device nameplate.
- Ensure that the power adapter meets the requirements of Clause 2.5 in IEC60950-1/EN60950-1 and it is tested and approved according to national or local standards.
- For pluggable device, the socket-outlet shall be installed near the device and shall be easily accessible.

Safety of Children

Keep the device and its accessories out of the reach of children. Otherwise, they may damage the device and its accessories by mistake, or they may swallow the small components of the device, causing suffocation or other dangerous situations.

Maintenance

- If the device is not used for a long time, power it off, and then remove all the cables connected to it.
- If any exception occurs, for example, if the device emits any smoke or unusual sound or smell, stop using the device immediately, power it off, remove all the cables connected to it, and then contact an authorized service center.
- Do not trample, pull, or overbend any cable. Otherwise, the cable may get damaged, causing malfunction of the device.
- Before cleaning the device, stop using it, power it off, and then remove all the cables connected to it.
- Use a clean, soft, and dry cloth to clean the device shell. Do not use any cleaning agent or spray to clean the device shell.

Disposal and Recycling Information



This symbol on the device (and any included batteries) indicates that the device (and any included batteries) should not be disposed of as normal household garbage. Do not dispose of your device or batteries as unsorted municipal waste. The device (and any batteries) should be handed over to a

certified collection point for recycling or proper disposal at the end of its life.

For more detailed information about the recycling of the device or batteries, contact your local city office, the household waste disposal service, or the retail store where you purchased this device.

The disposal of this device is subject to the Waste from Electrical and Electronic Equipment (WEEE) Directive of the European Union. The purpose for separating WEEE and batteries from other waste is to minimize any environmental impact and health hazard due to the presence of hazardous substances.

Reduction of Hazardous Substances

This device is compliant with the EU Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation (Regulation No 1907/2006/EC of the European Parliament and of the Council) and the EU Restriction of Hazardous Substances (RoHS) Directive (Directive 2002/95/EC of the European Parliament and of the Council). For more information about the REACH compliance of the device, visit the Web site www.huaweidevice.com/certification. You are recommended to visit the Web site regularly for up-to-date information.

EU Regulatory Conformance

This device should be installed and operated with a minimum distance of 20 cm between the antenna and all persons.

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www.huaweidevice.com/certification.

CE 0678 

Notice: Observe the national local regulations in the location where the device is to be used. This device may be restricted for use in some or all member states of the European Union (EU).

France: Outdoor use limited to 10 mW e.i.r.p. within the band 2454-2483.5 MHz.

Italy: For private use, a general authorisation is required if WAS/RLAN's are used outside own premises. For public use, a general authorisation is required.

Luxembourg: General authorisation required for network and service supply.

Norway: This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Ålesund.

Federal Communications Commission (FCC) Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device complies with part 68 of the FCC Rules.

This device should be installed and operated with a minimum distance of 20 cm between the antenna and all persons.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications made to this device not expressly approved by Huawei Technologies Co., Ltd. may void the FCC authorization to operate this device.

2 Product Overview

2.1 Product Features

The EchoLife HG552d (here in after referred to as the HG552d) is a high-performance Asymmetrical Digital Subscriber Line (ADSL) voice gateway designed for home users and small office and home office (SOHO) users. This section describes the features of the HG552d.

Flexible Routing

- Providing an embedded Point to Point Protocol over Ethernet (PPPoE) dialer
- Supporting the Dynamic Host Configuration Protocol (DHCP) server
- Supporting simultaneous multi-user access

Abundant Service Interfaces

- Providing four high-speed Ethernet interfaces
- Supporting the routing mode and the bridge mode
- Providing the voice function through the Plain Old Telephone Service (POTS) interface
- Supporting the multi-service set identifier (MSSID) of Wireless Fidelity (WiFi), which enables users to use wireless networks conveniently and securely
- Providing mobile storage capability through the USB host interface

Outstanding Voice Functions

Providing VoIP service and T.38 facsimile service

Standard TR-069 Management Capability

- Providing complete compatibility with the TR-069 standard of the Digital Subscriber Line (DSL) Forum
- Providing complete remote management and diagnosis
- Providing a zero-configuration solution, which significantly lowers the operation and maintenance costs and can be combined with the automatic upgrade and service provisioning processes to conveniently distribute customized services

ADSL/ADSL2+ Interface

- Providing embedded ADSL/ADSL2+ broadband network functions
- Supporting the ITU-T G.994.1 (G.hs) handshake protocol
- Providing compatibility with Annex A ANSI T1.413 Issue 2, ITU-T G.992.1 (G.dmt), G.992.3 (ADSL2), and G.992.5 (ADSL2+)

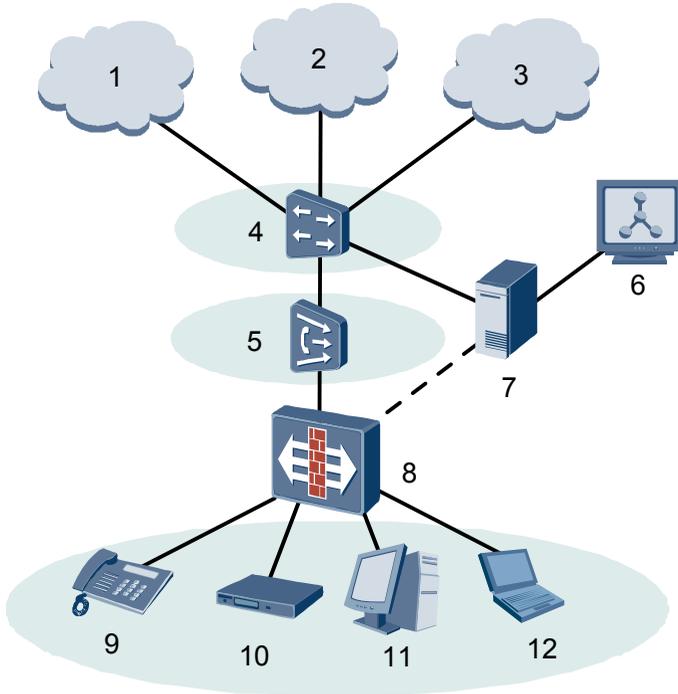
Wide Area Network (WAN) Protocol

- Supporting multiple AAL5 protocols, such as LLC and VC-MUX (RFC1483/2684)
- Supporting PPPoE (RFC2516)
- Supporting routing and bridging in conformance with RFC 2684

2.2 Network Application

Figure 2-1 shows the network application of the HG552d.

Figure 2-1 Network application of the HG552d



NOTE

— : indicates an actual network connection.

- - - : indicates a logical management channel.

Table 2-1 describes the elements shown in Figure 2-1.

Table 2-1 Description of the elements for the network application diagram

No.	Item	Full Name
1	NGN	Next Generation Network
2	Internet	-
3	IPTV	Internet Protocol Television
4	BRAS	Broadband Remote Access Server
5	DSLAM	Digital Subscriber Line Access Multiplexer
6	OSS	Operations Support System
7	ACS	Auto-Configuration Server
8	HG552d	-
9	Telephone	-
10	STB	set-top box
11	Desktop computer	-
12	Notebook computer	-

2.3 Indicators, Interfaces and Buttons

2.3.1 Indicators

The indicators of the HG552d are located on the front panel, as shown in Figure 2-2.

Figure 2-2 Indicators

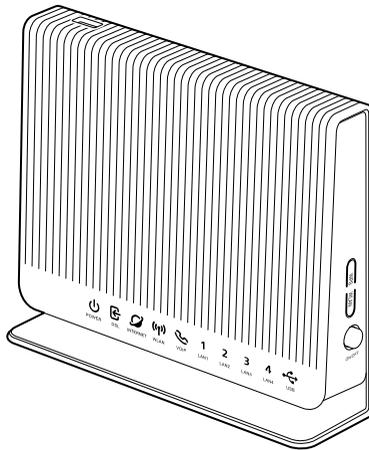


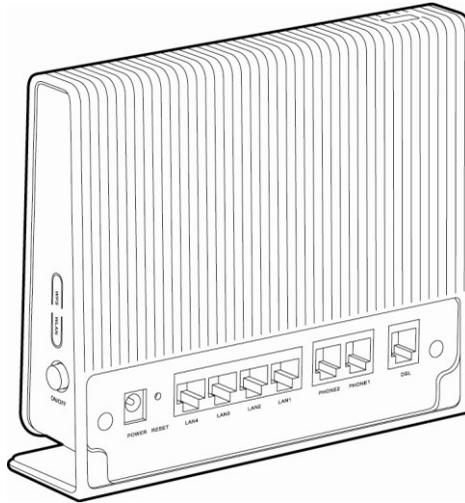
Table 2-2 describes the meanings of the indicators.

Table 2-2 Meanings of the indicators

Indicator	Status	Description
POWER	On	The HG552d is powered on.
	Off	The HG552d is powered off.
DSL	On	The DSL connection is established and activated.
	Blinking	The DSL connection is being activated.
	Off	The HG552d is powered off or faulty.
INTERNET	On	The Internet connection is set up, but no data is being transmitted on the WAN interface.
	Blinking	The Internet connection is set up, and data is being transmitted.
	Off	The HG552d is powered off or no Internet connection.
WLAN	On	The WLAN connection is successfully established but no data is being transmitted.
	Blinking	The WLAN connection is successfully established and data is being transmitted.
	Off	The HG552d is powered off or the WLAN connection is not yet established.
VOIP	On	The softswitch has logged in successfully.
	Off	The HG552d is powered off or no softswitch connection.
LAN1, LAN2, LAN3, LAN4	On	The LAN connection is successfully established but no data is being transmitted.
	Blinking	The LAN connection is successfully established and data is being transmitted.
	Off	The HG552d is powered off or the LAN connection is not yet established.
USB	On	The USB connection is successfully established at USB host mode but no data is being transmitted.
	Blinking	The USB connection is successfully established at USB host mode and data is being transmitted.
	Off	The HG552d is powered off or the USB connection is not yet established.

2.3.2 Interfaces and Buttons

The interfaces and buttons of the HG552d are located on the rear panel and side panel, as shown in Figure 2-3.

Figure 2-3 Interfaces and buttons

 **NOTE**

- The **USB** interface is on the top of the HG552d.
- The rear panel view and side panel view are for reference only. The actual appearance may differ.

Table 2-3 lists the functions of the interfaces and buttons.

Table 2-3 Functions of the interfaces and buttons

Interface/Button	is used to...
DSL	connect the HG552d to the MODEM interface on the splitter.
PHONE1, PHONE2	connect the HG552d to the telephone.
LAN1, LAN2, LAN3, LAN4	connect the HG552d to the Ethernet interface on the computer or STB.
RESET	restore the factory settings of the HG552d. NOTE After you restore the default settings, the customized data will be lost. Therefore, press the RESET button with caution.
POWER	connect the HG552d to the power adapter.
WLAN	enable or disable wireless network function quickly.
WPS	start the WPS negotiation of the HG552d.
ON/OFF	power on or off the HG552d.
USB (on the top of the HG552d)	connect the USB device.

2.4 System Requirements

Make sure that the following requirements are met before using the HG552d.

Operating System Requirements

The operating system (OS) requirements are as follows:

- Windows 98
- Windows Me
- Microsoft NT4
- Windows 2000
- Windows XP
- Windows Vista

PC Hardware Configuration

The requirements for the hardware configuration of the device are as follows:

- Memory: greater than 64 MB
- Remaining space of disk C: greater than 128 MB
- CD-ROM drive

Web Browser

Internet Explorer 6.0 or later versions, including FireFox 2.0

3 Product Installation

3.1 Connecting the Cables

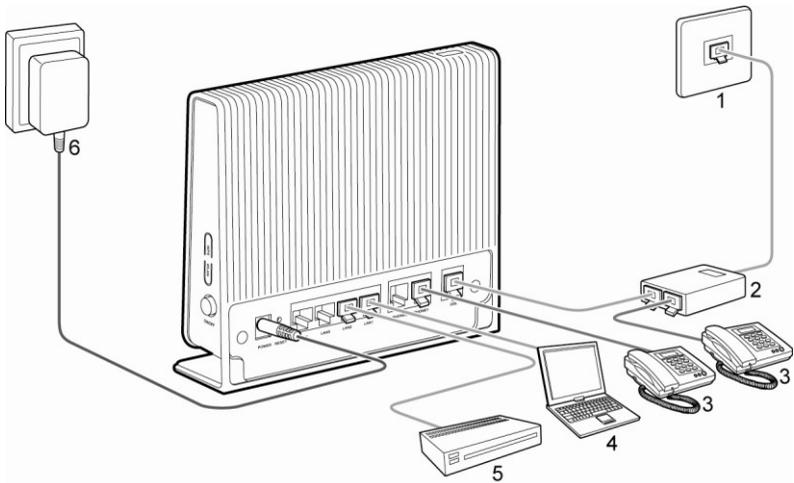


CAUTION

Before connecting the cables, power off all equipment connected to it including the HG552d, the PC, and the switch.

Connect the other equipment, such as the PC and the telephone, to the HG552d according to Figure 3-1.

Figure 3-1 Connecting the HG552d

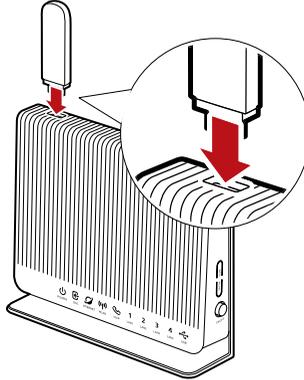


- | | | | | | |
|---|----------------------------|---|-------------|---|---------------|
| 1 | Telephone jack on the wall | 2 | Splitter | 3 | Telephone |
| 4 | Computer | 5 | Set-top box | 6 | Power adapter |

3.2 Connecting the USB Interface

The USB interface is on the top of the HG552d. Portable storage devices, such as USB flash drives and portable hard disks, can be connected to the USB interface. For the connection method, please see the following figure.

Figure 3-2 Connecting the USB Interface



3.3 Getting Started

To power on the HG552d, press the **ON/OFF** button on the side panel of the HG552d.

After you power on the HG552d, the **DSL** indicator blinks (for less than three minutes), which indicates that the HG552d is being activated. Later, the **DSL** indicator turns solid on. The **POWER** indicator is also solid on, which indicates that the HG552d is working properly.

4 Functions Introduction

4.1 Accessing the Web Configuration Page

The HG552d provides simple and easy-to-use Web configuration pages, through which you can check and configure the working parameters of the HG552d.

Before you log in to the Web configuration page of the HG552d, make sure the setting requirements of the PC as listed in Table 4-1 are met.

Table 4-1 Requirements on PC settings

Item	Requirement
Network protocol	Enable the TCP/IP.
IP address and subnet mask of the PC	Select Automatically obtain an IP address .
Internet Explorer	Do not use the proxy server.

To log in to the Web configuration page, do as follows:

- Step 1** Start the Internet Explorer on the PC.
- Step 2** Enter **http://192.168.1.254** in the address bar of the Internet Explorer, and then press **Enter**.
- The **Login** dialog box is displayed.
- Step 3** Enter the name and password in the **Login** dialog box, and then click **OK**.

 **NOTE**

By default, the user name and password is **operator** and **justr34d**.

4.2 Restoring Default Settings

You can quickly restore the default settings of the HG552d by pressing the **RESET** button on the rear panel. To restore the default settings, press and hold the **RESET** button for over six seconds after the HG552d is powered on, and then release the button. In addition, you can restore the default settings of the HG552d through the Web-based configuration utility. To restore the default settings through the Web-based configuration utility, do as follows:

- Step 1** Log in to the Web-based configuration utility.
- Step 2** Choose **Maintenance > Device** in the navigation tree.

Step 3 Click **Restore Default Settings** button.

After the preceding operations, the page jumps to the login page. You can log in to the Web-based configuration utility by entering the default user name and password. You can get them from the print label on the back panel of the shell.

5 Wireless Services

If a wireless network adapter is installed on your computer, you can connect your computer to the HG552d through a wireless connection.

There are two methods to configure the wireless network connection.

5.1 Configuring the Wireless Connection by the Web Page

To configure the wireless network connection by configuring the web page, do as follows:

- Step 1** Set the wireless network name and access password of the HG552d (taking the authentication type WPA-PSK as an example):
1. Log in to the Web-based configuration utility.
 2. In the navigation tree on the left, choose **Basic > WLAN**.
 3. Ensure select the **Enable WLAN** option button.
 4. Enter a wireless network name in the **SSID** text box.
 5. Select **WPA-PSK** from the **Security Mode** drop-down combo box.
 6. Enter an access password in the **WPA pre-shared Key** text box.
 7. Select **TKIP** from the **WPA Encryption** drop-down combo box, and keep the default settings of other parameters.
 8. Click **Submit** to save the settings.
- Step 2** Enable the wireless configuration service provided by Windows XP.
1. Right-click **My Computer**, and then choose **Manage** from the shortcut menu.
 2. In the **Computer Management** window, choose **Computer Management (Local) > Services and Applications > Services**.
 3. From the services listed in the right pane of the **Computer Management** window, right-click **Wireless Zero Configuration**, and then choose **Properties** from the shortcut menu.
 4. In the **Wireless Zero Configuration Properties (Local Computer)** dialog box, check whether **Service status** is **Started**. If not, click **Start**.
 5. Click **OK** to close the dialog box, and then close the **Computer Management** window.
- Step 3** Configure the wireless network connection on your computer (taking the Windows XP operating system as an example):
1. Choose **Start > All Programs > Accessories > Communications > Network Connections**.

2. In the Network Connections window, right-click **Wireless Network Connection** to display a shortcut menu, and then select **View Available Wireless Networks** from the shortcut menu.
3. Select the wireless network that is configured in Step 1 from the wireless network list, and then click **Connect** in the lower right corner of the window.
4. In the displayed dialog box, enter the access password that is preset in Step 1, and then click **Connect**.

After the password is verified, **Connected** appears on the icon of the wireless network in the wireless network list, which indicates that your computer is connected to the HG552d through wireless connection.

5.2 Configuring the Wireless Connection by the WPS Button

If the wireless network adapter on your computer supports the WPS function, you can connect your computer to the HG552d wirelessly as follows:

- Step 1** Set the WLAN parameters of HG552d, and then set the Security to WPA-PSK, WPA2-PSK or WPA-PSK/WPA2-PSK as prompted. For details, see the Step1 of chapter 5.1 "Configuring the Wireless Connection by the Web Page."



NOTE

The WPS function can be used only when the security mode of the WLAN is set to WPA-PSK, WPA2-PSK, or WPA-PSK/WPA2-PSK.

- Step 2** Press the WPS button on the side panel to start the WPS negotiation of the HG552d. Then the WPS indicator of the HG552d blinks.
- Step 3** Enable the WPS negotiation function of the wireless network adapter within 2 minutes. Wait for a few seconds, and then you can see the WPS indicator becomes solid on from the blinking state, indicating that the HG552d is connected to your PC through the WPS function. This state lasts 5 minutes. Then the WPS indicator turns off.

6 Appendix

6.1 Default Settings

Parameter	Setting
IP address of the LAN interface	192.168.1.254
Subnet mask of the LAN interface	255.255.255.0
User name used for logging in to the Web configuration page	operator
Password used for logging in to the Web configuration page	justr34d
Wireless network function	Enable

6.2 Technical Specification

Item	Specification	
Power supply	12 V DC, 1.5 A	
Power consumption	< 18 W	
Ambient temperature for operation	0°C to 40°C(32°F to 104°F)	
Relative humidity for operation	5% to 95%, non-condensing	
Dimensions (L × W × H)	173 mm × 48 mm × 146.5 mm	
Weight	< 500g	
Standards	DSL standards	ADSL, ADSL2 and ADSL2+
	WLAN standards	802.11b, 802.11g and 802.11n

7 FAQs

7.1 How can I configure a computer to use a static IP address?

Take a computer that runs Windows XP as an example. To configure the computer to use a static IP address, do as follows:

- Step 1** In the Control Panel window, double-click **Network Connections** to display the Network Connections window.
- Step 2** In the Network Connections window, right-click the **working Local Area Connection** and choose **Properties**.
- Step 3** In the This connection uses the following items group box of the **Local Area Connection Properties** dialog box, select **Internet Protocol (TCP/IP)**. Click **Properties**.
- Step 4** Select **Use the following IP address**.
- Step 5** Set the IP address of the computer and ensure that the IP address is in the same network segment as the local area network (LAN) IP address of the terminal.

Assume that the default LAN IP address of the terminal is 192.168.1.254. To set the IP address of the computer, do as follows:

1. In **IP address**, enter **192.168.1.100**. Ensure that this IP address is unique and not used by other computers.



NOTE

The configurable static IP address ranges from 192.168.1.1 to 192.168.1.253.

2. In **Subnet mask**, enter **255.255.255.0**.
 3. In **Default gateway**, enter **192.168.1.254**.
- Step 6** Consult your network service provider about the IP address of the domain name server (DNS). In **Preferred DNS server** and **Alternate DNS server**, enter the IP address.

If you configure the static IP address for the purposes of accessing the Web configuration page of the terminal, you can skip this step.

- Step 7** In the **Internet Protocol (TCP/IP) Properties** dialog box, click **OK**. Then in the **Local Area Connection Properties** dialog box, click **OK**.

7.2 What can I do if I cannot visit Web sites through the terminal?

Step 1 Check whether the POWER indicator of the terminal is on.

If the POWER indicator is off, perform further checks as follows:

1. Ensure that the power switch of the terminal is turned on.
2. Ensure that electricity comes from the socket and that the input power of the socket meets the requirements described on the label of the terminal power adapter. If the voltage is unsteady, for example, if the voltage is too high or too low, do not use the terminal. Wait until the voltage restores to its normal level, and then use the terminal.
3. Ensure that the terminal is properly connected to the socket through the power adapter.

If the POWER indicator is still off, contact an authorized maintenance center.

Step 2 After powering on the terminal, wait for about three minutes. Then check whether the DSL indicator of the terminal is on.

If the DSL indicator blinks for a long time, perform further checks as follows:

1. Ensure that telephone lines are properly connected. Especially ensure that the telephone line connecting to the splitter is properly connected.
2. Ensure that terminal cables or telephone lines are far from the electric appliances that generate strong magnetic or electric fields.
3. Replace telephone lines.

If the DSL indicator still blinks, contact your network service provider.

Step 3 Check whether the LAN indicator of the terminal is on.

If the LAN indicator is off, perform further checks as follows:

1. Ensure that the network adapter of the computer is enabled.
2. Ensure that the network cable between the terminal and the computer is properly connected.
3. Remove and then insert the network cable or replace the network cable.

If the LAN indicator is still off, contact an authorized maintenance center.

Step 4 Check whether the driver for the network adapter is properly installed.

Take a computer that runs Windows XP as an example. To check whether the driver for the network adapter is installed, do as follows:

1. On the desktop, right-click **My Computer** and choose **Manage**.
2. In the navigation tree of the **Computer Management** window, choose **Device Manager**.
3. In the right pane of the **Computer Management** window, click **Network adapters** to view the information about the network adapter of the computer.

If no network adapter is detected or if a question mark (?) or an exclamation mark (!) is displayed next to the icon of the network adapter, you can infer that the driver for the network adapter is not properly installed. In this case, re-install the driver for the network adapter of the computer.

For details about how to set the parameters, see the description of the PPP dialing software.

Step 5 Ensure that you have entered the correct user name and user password that are required by the PPP dialing software.

The user name and the user password are provided by your network service provider.

Step 6 Check whether you can use the PPP dialing software to dial successfully.

If you cannot use the PPP dialing software to dial successfully, perform further checks as follows:

1. Stop the PPP dialing software and then power off the terminal. After five minutes, power on the terminal and use the PPP dialing software to dial again.
2. Restore the default settings of the terminal.

If the problem persists, contact your network service provider.

Step 7 Check whether the proxy server of the Web browser is correctly configured. Take the Internet Explorer installed on a computer that runs Windows XP as an example. To check whether the proxy server of the Web browser is correctly configured, do as follows:

1. Start the Internet Explorer.
2. Choose **Tools > Internet Options**.
3. In the **Internet Options** dialog box, click the **Connections** tab.
4. In the **Local Area Network (LAN) settings** group box, click **LAN settings**.
5. In the **Proxy server** group box of the **Local Area Network (LAN) Settings** dialog box, ensure that **Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections)** is not selected.

Step 8 Try to access multiple other Web sites to check whether the terminal can access.

If the terminal still cannot access other Web sites, contact your network service provider.

7.3 What can I do if the terminal cannot access the Internet through a wireless network adapter?

Step 1 Ensure that the power cables and telephone lines of the terminal are properly connected.

Step 2 Check whether the WIFI indicator of the terminal is on.

If the WIFI indicator is off, you can infer that the wireless local area network (WLAN) function of the terminal is disabled. In this case, enable the WLAN function.

For details about how to enable the WLAN function, see the manual of the terminal.

Step 3 See the description of the wireless network adapter that is installed on the computer and check whether the wireless network adapter supports the 802.11b and 802.11g protocols.

If the wireless network adapter does not support the 802.11b and 802.11g protocols, replace it with the network adapter that supports the protocols.

Step 4 Check whether the driver for the wireless network adapter is properly installed on the computer.

If the driver is improperly installed, install it properly.

Step 5 Check whether the computer can receive the signals of a WLAN.

Take a computer that runs Windows XP as an example. To check whether the computer can receive the signals of a WLAN, do as follows:

1. In the **Control Panel** window, double-click **Network Connections** to display the **Network Connections** window.
2. In the **Network Connections** window, right-click **Wireless Network Connection** and choose **View Available Wireless Network**.

If the computer cannot detect a WLAN, place the computer close to the terminal and ensure that no obstacles such as cement or wooden walls are present between the wireless client and the terminal.

Step 6 Check whether the computer accesses the WLAN of the terminal successfully.

Check the list of wireless network connections and ensure that the terminal is connected to the WLAN.

Step 7 Check whether you can use the PPP dialing software to dial successfully.

Step 8 Try to access multiple Web sites to check whether the terminal can access other Web sites.

If the terminal cannot access other Web sites either, restore the default settings of the terminal. If the problem persists, contact your network service provider.

7.4 What can I do if sometimes the terminal cannot access the Internet through a wireless network adapter or if the WLAN connection is unsteady?

Step 1 Check the positions of your terminal and computer. Ensure that they are far from the electric appliances such as microwave ovens, refrigerators, or cordless telephones that generate strong magnetic or electric fields.

Step 2 Place your terminal in an open position.

Although radio signals can pass through obstacles, the transmission effects of WLAN radio signals are affected if radio signals pass through too many obstacles such as cement or wooden walls.

Step 3 Place your computer close to your terminal.

If your computer is far from your terminal, the effects of the WLAN are affected.

Step 4 Place your terminal and computer in another direction.

Step 5 Do not use your terminal to access a WLAN during thunderstorms.

7.5 What can I do if the WLAN of the terminal is not encrypted and the computer cannot access the WLAN?

Step 1 Delete the settings of wireless network connections from your computer.

Take a computer that runs Windows XP as an example. To delete the settings of wireless network connections, do as follows:

1. In the **Control Panel** window, double-click **Network Connections** to display the **Network Connections** window.
2. In the **Network Connections** window, right-click **Wireless Network Connection** and choose **Properties**.
3. In the **Wireless Network Connection Properties** dialog box, click the **Wireless Networks** tab.
4. In the **Preferred Networks** group box, select the latest wireless network connection saved on your computer. Then click **Remove**.
5. Delete all the other wireless network connections from the **Preferred Networks** group box.
6. Click **OK**.

Step 2 Create a wireless network connection that is not encrypted.

7.6 Is there any restriction on the number of the computers that access a WLAN through wireless network adapters?

Theoretically, the terminal supports hundreds of concurrent computers that access the Internet through wireless network adapters. In practical applications, for the purposes of the high performance of a wireless network, the number of the concurrent computers that connect to the terminal should not exceed five.

7.7 What can I do if I cannot access the terminal configuration page?

Step 1 See the answer to 7.2 "What can I do if I cannot visit Web sites through the terminal?" and ensure that the power supply of the terminal works properly and that the telephone lines and network cables of the terminal are properly connected.

Step 2 Check the IP address of your computer and ensure that this IP address is in the same network segment as the LAN IP address of the terminal.

Step 3 Ensure that your Web browser does not use a proxy server.

Step 4 Ensure that you have entered the correct user name and user password that are used for accessing the terminal configuration page.

Step 5 If the problem persists, restore the default settings of the terminal.

7.8 What can I do if Web pages often cannot be displayed during Web page browsing and can be displayed after the terminal is restarted?

Step 1 Ensure that the terminal and other devices such as telephones or fax machines are connected to the telephone line through a splitter.

For details about how to install a splitter, see the related description in the manual.

Step 2 Ensure that telephone lines are properly connected.

If the telephone lines are improperly connected, the stability of the network connection is affected.

Step 3 Check the positions of your terminal and computer. Ensure that they are far from the electric appliances such as microwave ovens, refrigerators, or cordless telephones that generate strong magnetic or electric fields.

If the problem persists, contact your service provider.

7.9 What can I do if noises exist during telephone calls?

Step 1 Ensure that a splitter is installed.

A splitter helps to protect the call quality of the asymmetric digital subscriber line (ADSL) from being affected due to the interference of other type of signals.

Step 2 Ensure that telephone lines are properly connected. Especially ensure that the telephone line connecting to the splitter is properly connected.

Step 3 Replace telephone lines and ensure that the telephone lines are not faulty.

7.10 After a broadband terminal is installed, does Internet access degrade call quality or do telephone calls lower the Internet access rate?

No. The terminal uses the frequency division multiplexing (FDM) and splitter technologies to separate voice signals from data signals. Although the two types of signals are transmitted through one telephone line, they are carried by different frequency bands. Therefore, they do not interfere with each other. In this case, you can make a telephone call and access the Internet at the same time, without degrading call quality or lowering the Internet access rate.

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